



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/597,259

09/05/2006

Peter Edward Burton

06097

8421

23338 7590 08/26/2009  
DENNISON, SCHULTZ & MACDONALD  
1727 KING STREET  
SUITE 105  
ALEXANDRIA, VA 22314

EXAMINER

O HERN, BRENT T

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/26/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/597,259	<b>Applicant(s)</b> BURTON ET AL.	
	<b>Examiner</b> Brent T. O'Hern	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claims***

2. Claims 1-13 are pending with claims 11-13 new.

### **WITHDRAWN REJECTIONS**

3. All rejections of record in the Office action mailed 3/17/2009 have been withdrawn due to Applicant's arguments and amendments in the Paper filed 8/17/2009.

### **NEW REJECTIONS**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (US 6,129,871).

Regarding claim 1, Suzuki ('871) teaches a hard wood strand product including substantially aligned strands of one or more eucalypts bonded together with a binder including an isocyanate resin (See col. 4, ll. 1-30, l. 62 to col. 5, l. 9 and col. 5, ll. 35-49.).

Regarding claim 9, Suzuki ('871) teaches a lumber or board product (See *Abstract.*).

***Claim Rejections - 35 USC § 102/103***

5. Claims 7 and 10-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Suzuki et al. (US 6,129,871).

Suzuki ('871) teaches the eucalypt product bonded with isocyanate (*See col. 4, ll. 1-30, l. 62 to col. 5, l. 9 and col. 5, ll. 35-49.*) and inherently teaches at least 70% of the strands being fully aligned, the product having a modulus of elasticity of  $\geq 14,000$  N/mm<sup>2</sup> and wherein the strands are formed from plantation trees having an age between 8 years and 12 years (*See col. 4, ll. 1-30, l. 62 to col. 5, l. 9 and col. 5, ll. 35-49 where Suzuki ('871) teaches orientating the wood strands in the same direction. Since the eucalypt is the same it also has the same modulus of elasticity. Applicant's claims are interpreted as being directed to a board and not to trees of any particular age. Applicant does not submit any evidence or analysis explaining how the properties of the boards differ from strands of different age trees.*).

In the alternative, a person having ordinary skill in the art would obviously appreciate or provide a board with the above orientation, elasticity and age so as to provide a strong, elastic board from trees of a usable size. Thus, a rejection under 35 USC 102/103 is proper (*See MPEP 2112.*).

***Claim Rejections - 35 USC § 103***

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 6,129,871).

Suzuki ('871) teaches the eucalypt product discussed above, however, however fails to expressly disclose the hard wood being eucalypts selected from the species

Art Unit: 1794

such as Bluegum (E. Globulus), Karri (E. Diversicolor), Sydney Bluegum (E. Saligna), Marri (E. Calophylla) or Jarrah (E. Marginata).

It would have been obvious to a person having ordinary skill in the art at the time Applicant's invention was made to use the alternative species of eucalypts in Suzuki ('871) to make a suitable wood product for a consumer. Furthermore, Applicant does not set forth any non obvious reason for using species of eucalypts over another.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to use eucalypt strands having the above species in Suzuki ('871) in order to provide a wood product that is suitable for its intended purpose.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 6,129,871) in view of Shaner et al. (US 4,361,612) and Liu et al. (US 2003/0064230).

Suzuki ('871) teaches the eucalypt product discussed above, however, fails to expressly disclose wherein the binder is a polymeric methane di-isocyanate resin and includes a wax.

Shaner ('612) teaches an oriented strand board made of hard wood strands with a binder including a resin and wax (*See Abstract, col. 3, l. 56 to col. 4, l. 12 and col. 6, ll. 45-63.*).

Liu ('230) teaches using binders such as methane di-isocyanate resin and wax to bind oriented hard wood strand boards (*See paras. 16-18 and 23.*) for the purpose of providing strong boards that are water resistant (*See paras. 18 and 23.*).

Art Unit: 1794

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to use hardwood eucalypt strands with the diisocyanate resin and wax as taught by Liu ('230) and Shaner ('612) in Suzuki ('871) in order to provide a strong water resistant effective board.

8. Claims 4-6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 6,129,871) in view of Shaner et al. (US 4,361,612).

Suzuki ('871) teaches the eucalypt product discussed above, however, fails to expressly disclose the strands having an average length between 145 mm and 180 mm, an average width of about 10 to 25 mm, an average thickness between 0.5 mm and 1.5 mm, a density of between 600 kg/m<sup>3</sup> to 850 kg/m<sup>3</sup>.

However, Suzuki ('871) teaches there is no particular limitation to the length, width and thickness (*See col. 4, ll. 16-24.*) but rather the parameters may be adjusted to the application of the board and the characteristics (*See col. 4, ll. 16-24.*).

Shaner ('612) teaches an oriented strand board made of hard wood strands with the length of the strands being up to 8 inches (203 mm), up to 2 inches (51 mm) wide and a thickness from 0.010 to 0.100 inches (0.254 to 2.54 mm) and a density of 40 to 50 lb/ft<sup>3</sup> (641-801 kg/m<sup>3</sup>) (*See Abstract, col. 3, l. 56 to col. 4, l. 12 and col. 6, ll. 45-63.*), for the purpose of providing a strong board and resists delamination (*See col. 4, ll. 53-60.*).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to use strands having the above dimensions and

Art Unit: 1794

density as taught by Shaner ('612) in Suzuki ('871) in order to provide a strong delamination resistant board that is suitable for its' intended application.

### **ANSWERS TO APPLICANT'S ARGUMENTS**

9. In response to Applicant's arguments regarding Shaner ('612) as a primary reference (*See pp. 4-17 of Applicant's Paper filed 8/17/2009.*), it is noted that said reference is no longer cited as a primary reference, thus, all arguments regarding such are moot.

10. Applicant's arguments (*See pp. 4-17 of Applicant's Paper filed 8/17/2009.*) have been fully considered and are persuasive, thus, as discussed above all rejections have been withdrawn.

11. Applicant sets forth arguments about a Clarke reference, however, no such reference is cited, thus, it is unclear whether Applicant is referring to a different case or precisely what.

12. The newly cited, Suzuki ('871) reference teaches a hard wood strand product including substantially aligned strands of one or more eucalypts bonded together with a binder including an isocyanate resin (*See col. 4, ll. 1-30, l. 62 to col. 5, l. 9 and col. 5, ll. 35-49.*), thus, it is unnecessary for one to look to secondary references for teaching the isocyanate resin.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571)272-0496. The examiner can normally be reached on Monday-Thursday, 9:00-6:00.

Art Unit: 1794

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brent T. O'Hern/  
Examiner, Art Unit 1794  
August 25, 2009